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In support of LD 336 SP 142 An Act To Encourage Research To Support the Maine Offshore Wind Industry

Before the 130th Maine Legislature, First Special Session Committee on Energy, Utilities and Technology, Augusta, Maine (via Zoom) May 11, 2021

Dear Distinguished members of the committee, thank you for hearing my testimony. My name is Alison Bates, I am a professor of renewable energy courses and environmental studies at Colby College, and I have conducted many years of research on offshore wind and the benefits to coastal communities.

I am speaking **in support of** the bill to encourage floating offshore wind research. Maine has a unique and unparalleled opportunity to develop an offshore wind industry in a way that is data driven, based on best available science, to support any offshore wind industry growth in a prudent and informed way.

The U.S. is undergoing a substantial energy transition, where clean and renewable energy will make up a large portion of the energy we consume. Offshore wind has tremendous potential in the Gulf of Maine, and can help support a local industry that will create new jobs, develop supply chains, and reduce reliance on polluting fossil fuels.

In Maine, our deep waters promote incredible biodiversity, support many thousands of jobs, and contribute to the blue economy. Our deep waters also mean that energy development requires unique and new technology, floating wind turbines.

Floating offshore wind is an emerging industry, and we are likely to see significant interest from the offshore wind industry in the coming years. Maine is in an enviable position to be proactive and take a thoughtful, prudent approach to floating wind development by supporting researchbased development, now. We need both human, community and ecological research to understand how this technology will interact with Maine's economy, ecosystems, and livelihoods.

There is a wide range of research needs to understand how floating offshore wind will impact Maine's workers, industries, fishing, recreational opportunities, and ecosystems. Long-term studies that document both the opportunities and challenges of offshore wind have taken place under different conditions, in Europe and Asia, with different wind turbine technology – fixed base platforms. The technological differences of floating wind means that people and species will interact differently, and we critically need opportunities to study those interactions *in-situ*. We simply cannot rely on desk-based analyses or assume our experiences here in Maine will be the same as what others have experienced.

The learning that can come from an offshore wind research site will help to answer how coastal communities interact with offshore wind turbines, identify the tradeoffs, learn about risk and safety, and inform any future industry developments in a data driven manner. The Research Array that is proposed by the State addresses what has long been identified as a necessary step for offshore wind in the U.S.: obtaining data that is collected here, by Mainers and for Mainers, so that we are leading the industry and designing our own roadmap. The opportunity to do floating offshore wind right is urgent, and the opportunity is here. This can be done in a way that helps to preserve communities at sea, and shoreside communities, by approaching offshore wind in a balanced and cautious approach.

We have the opportunity to take this bold and necessary step in Maine, and I urge you to vote that we pass *An Act To Encourage Research To Support the Maine Offshore Wind Industry*. Thank you for hearing my testimony.